



# SIKA AT WORK

## UPPER HUNDREDS MSCP AYLESBURY

REFURBISHMENT

Sikafloor®-32 Pronto, Sika® Reemat Premium, Sika Rapid Repair Mortar  
and Sikafloor® -156

BUILDING TRUST



# UPPER HUNDREDS MSCP AYLESBURY

## PROJECT DESCRIPTION

Upper Hundreds MSCP is located in Aylesbury Town Centre with spaces for 305 vehicles. The car park, which is owned by Aylesbury District Council, was suffering from a failed waterproofing system on its top deck, allowing water ingress into the lower decks of the car park. This water ingress had caused spalling to the concrete screed, to the ramps and pedestrian walkways.

After further testing it was found that the concrete substrate did not have sufficient cohesive strength to support the application of a new car park deck system without further case hardening.

## PROJECT REQUIREMENTS

To remove existing failed coatings and concrete screed and repair damaged concrete on deck, ramps and soffits. Apply a case hardening resin to increase the cohesive strength of the concrete and apply a waterproof car park deck system, with fast setting properties, to prevent further water penetration and resulting damage.

## SIKA SOLUTION

Concrete repairs were carried out using Sika® Rapid Repair Mortar, a cementitious mortar with high early strength. The high early strength property ensured that the time the deck was out of service was kept to a minimum.

To increase the cohesive strength of the concrete decks, application of a case hardening resin was required. Sikafloor®-156 low viscosity epoxy case hardening resin was chosen to strengthen the concrete prior to the application of further car park deck systems.

To ensure the future integrity of the car park, a waterproof car park deck system, with fast setting properties was required, to prevent future water penetration and the resulting damage. Makers, the main contractors on the project, applied Sikafloor®-32 Pronto, a fast curing, crack bridging, mechanically and chemically resistant, elastomeric deck system. This system was chosen to give a, slip resistant, hard wearing waterproof surface.

Sika® Reemat Premium was incorporated into the Sikafloor®-32 Pronto system to protect areas of movement such as construction joints, existing cracking and up-stands. The Sikafloor®-32 Pronto system with the inclusion of Sika® Reemat Premium has been fully tested to meet the highest crack bridging standards available on the market. These include BSEN1062-7 Method B, which tests the complete system through 20,000 crack cycles up to 0.5mm @ -20 °C. The test demonstrates the ability of the system to protect against reflective cracking penetrating through the membrane and ensures the future integrity of the deck.

The fast setting properties of Sikafloor®-32 Pronto decking system, even at low temperatures, allows work to proceed quickly, minimising disruption to the client.

Sika Car Park Decking systems are specially designed to meet the harsh conditions that car parks are subject to, and provide durability, cost effectiveness and an excellent finish.



# UPPER HUNDREDS MSCP AYLESBURY



## PROJECT PARTICIPANTS

Project Owner: Aylesbury Vale District Council

Engineer: Vinci Technology

Contractor: Makers

Sika Organisation: Sika UK Limited

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